

Dynamics of point vortices for the lake equations

Evelyne Miot

Université Grenoble Alpes
EVELYNE.MIOT@UNIV-GRENOBLE-ALPES.FR

Abstract

We study the asymptotic dynamics of point vortices for the lake equations with positive depth, when the vorticity is initially sharply concentrated around N points. More precisely, we show that the vorticity remains concentrated in some sense around N points for all times, and that the trajectories follow the level lines of the depth function.

This is joint work with Lars Eric Hientzsch (Universität Bielefeld) and Christophe Lacave (Université Grenoble Alpes).